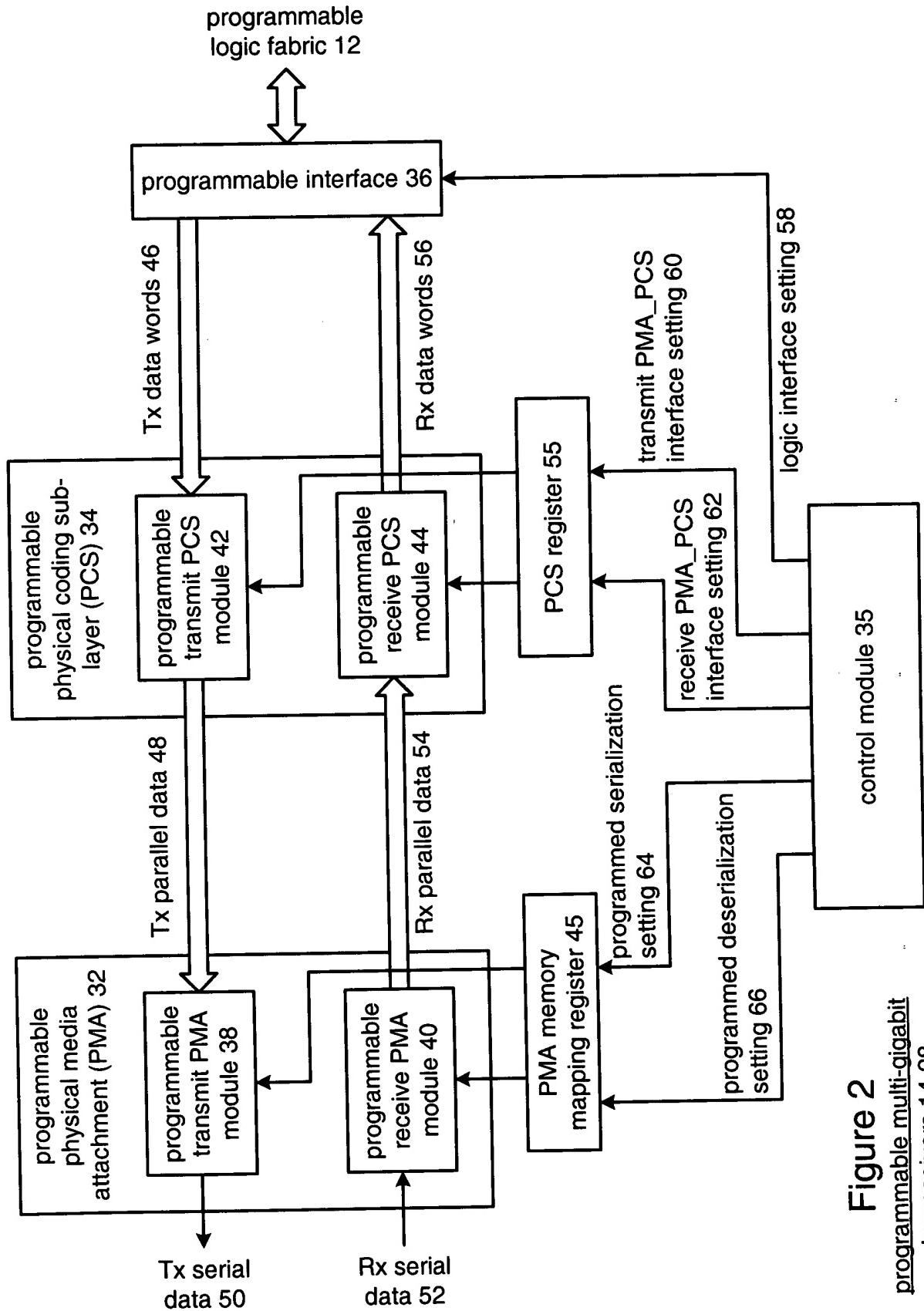
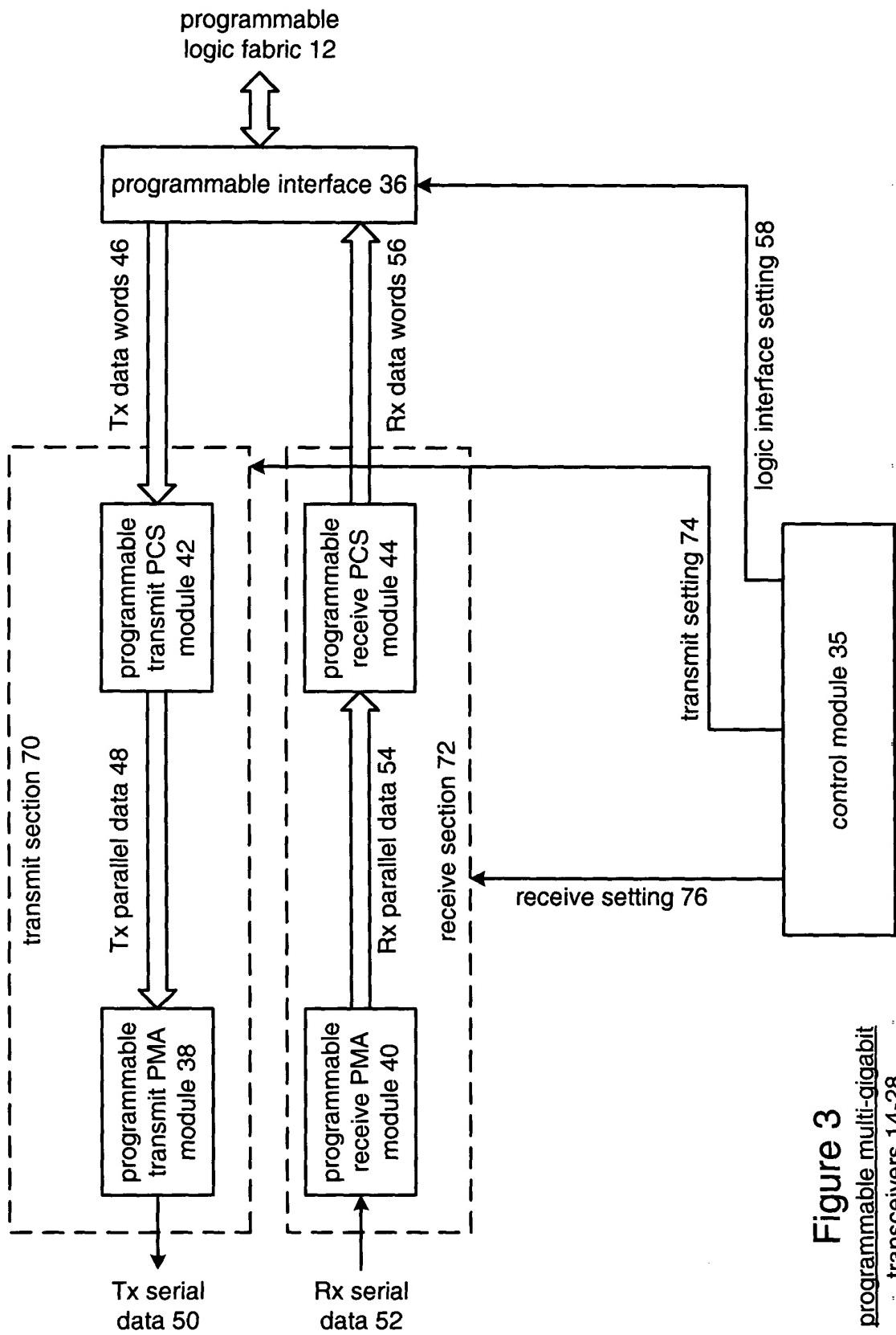


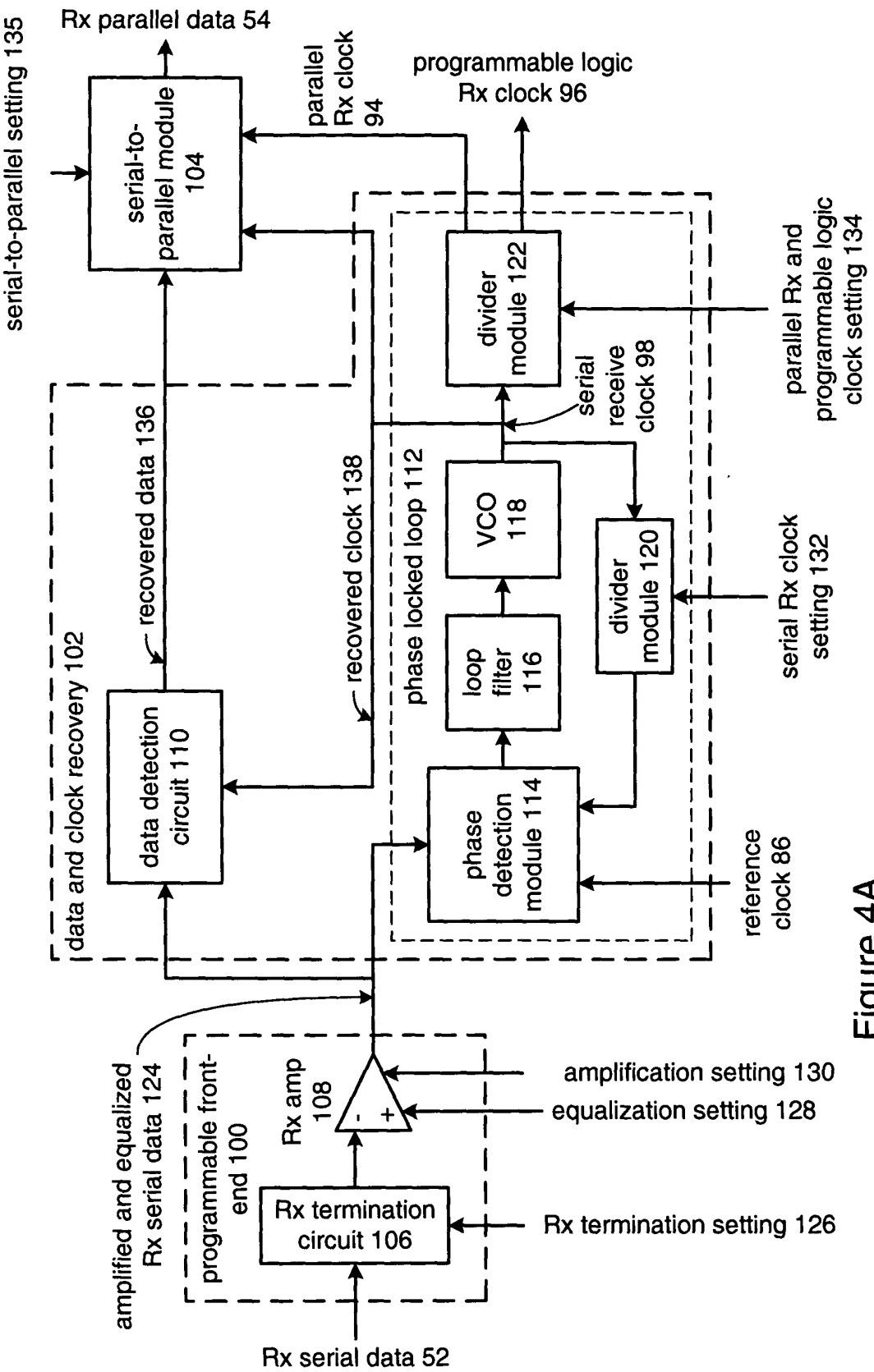
Figure 1  
programmable  
logic device 10



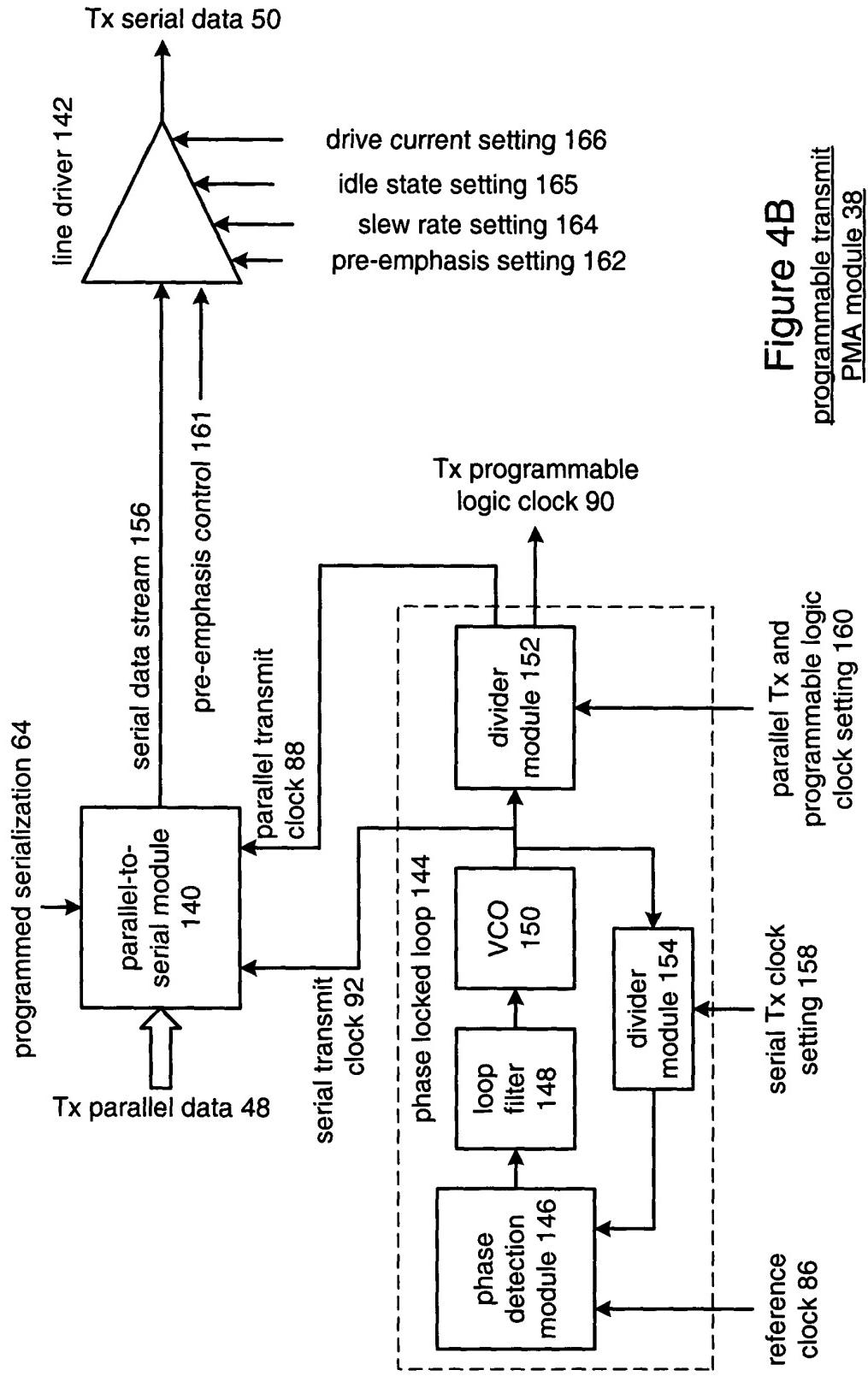
**Figure 2**  
programmable multi-gigabit  
transceivers 14-28



**Figure 3**  
programmable multi-gigabit  
transceivers\_14-28

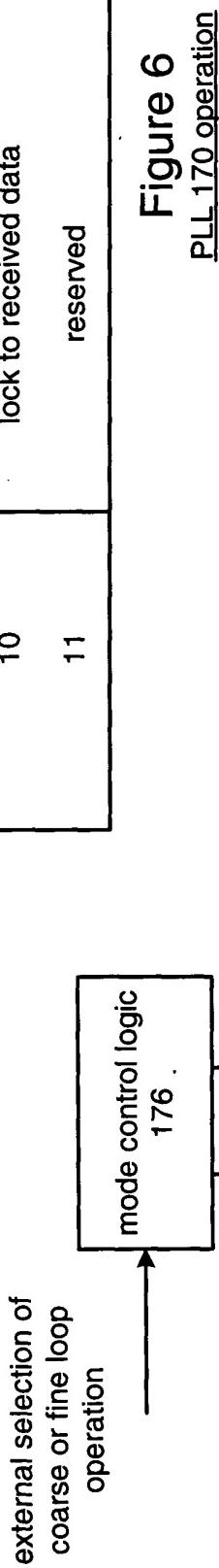


**Figure 4A**  
programmable receive  
PMA module 40

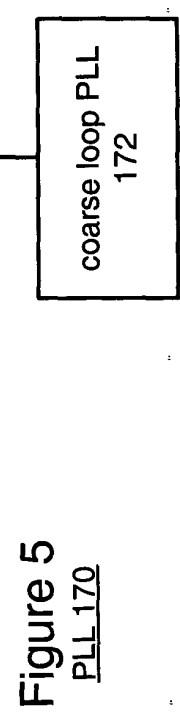


**Figure 4B**  
programmable transmit  
PMA module 38

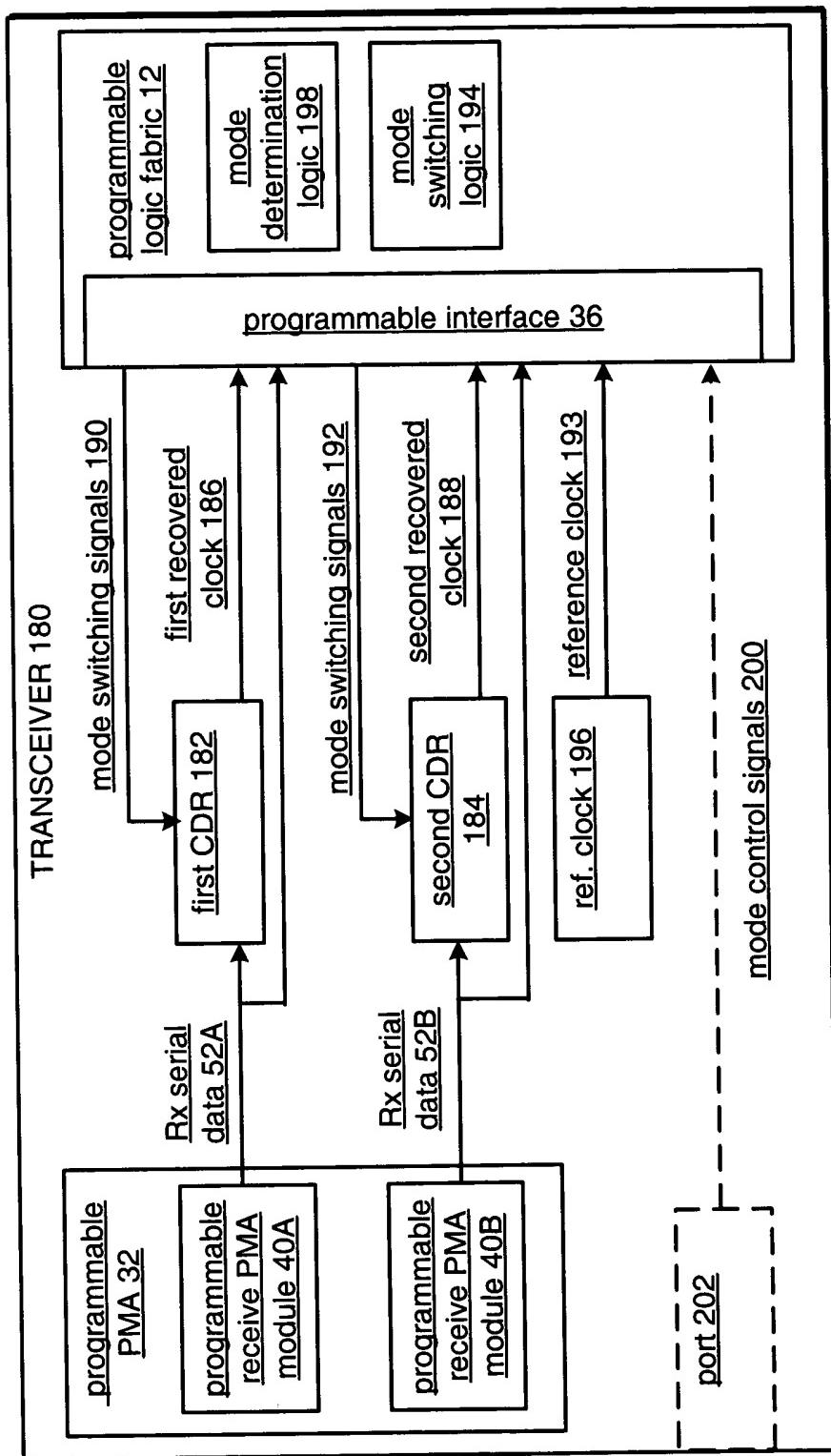
user selected mode	description
00	automatic (default)
01	lock to local reference for data sampling operations
10	lock to received data
11	reserved



**Figure 6**  
PLL 170 operation



**Figure 5**  
PLL 172



**Figure 7**  
transceiver 180

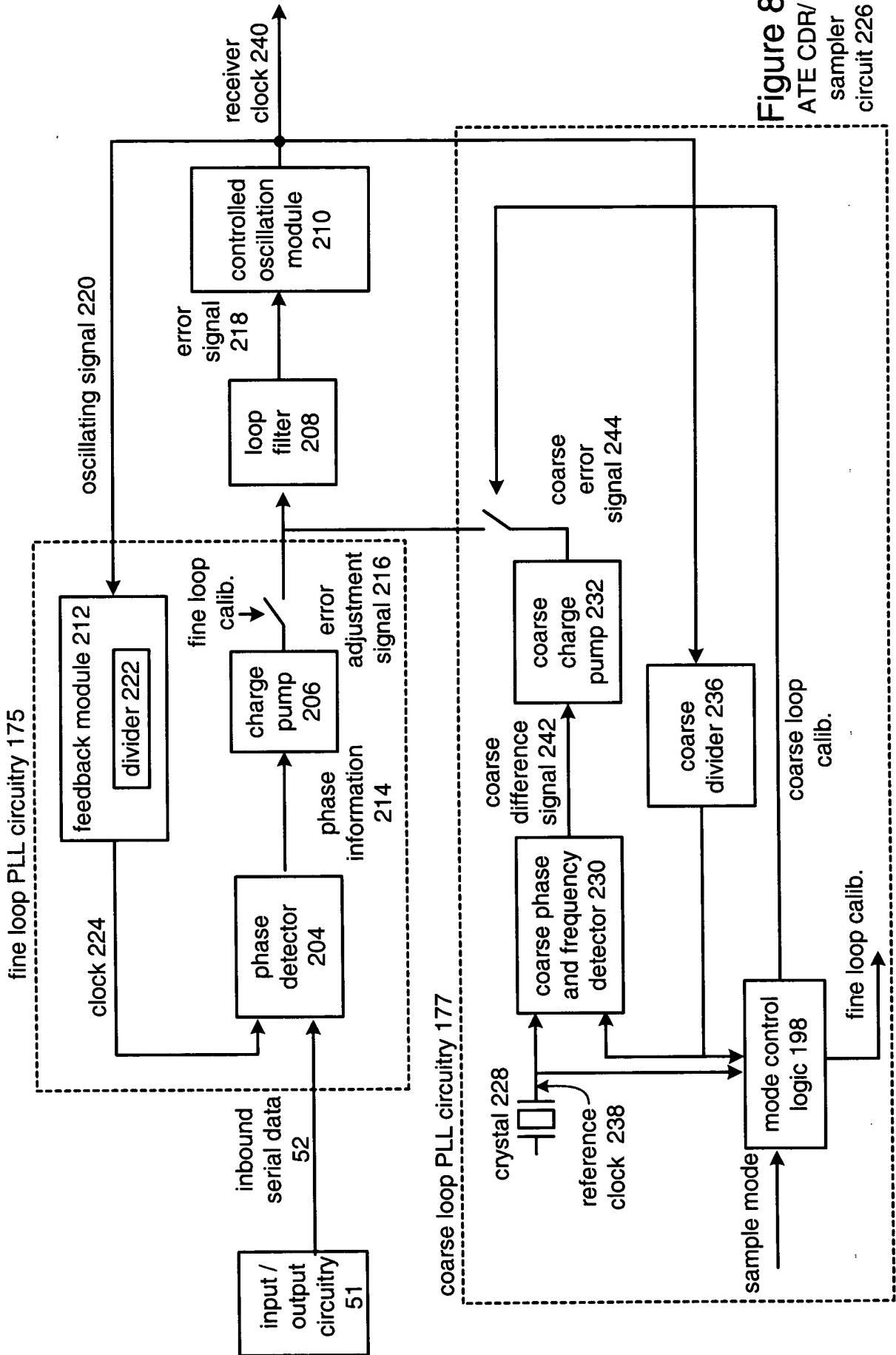
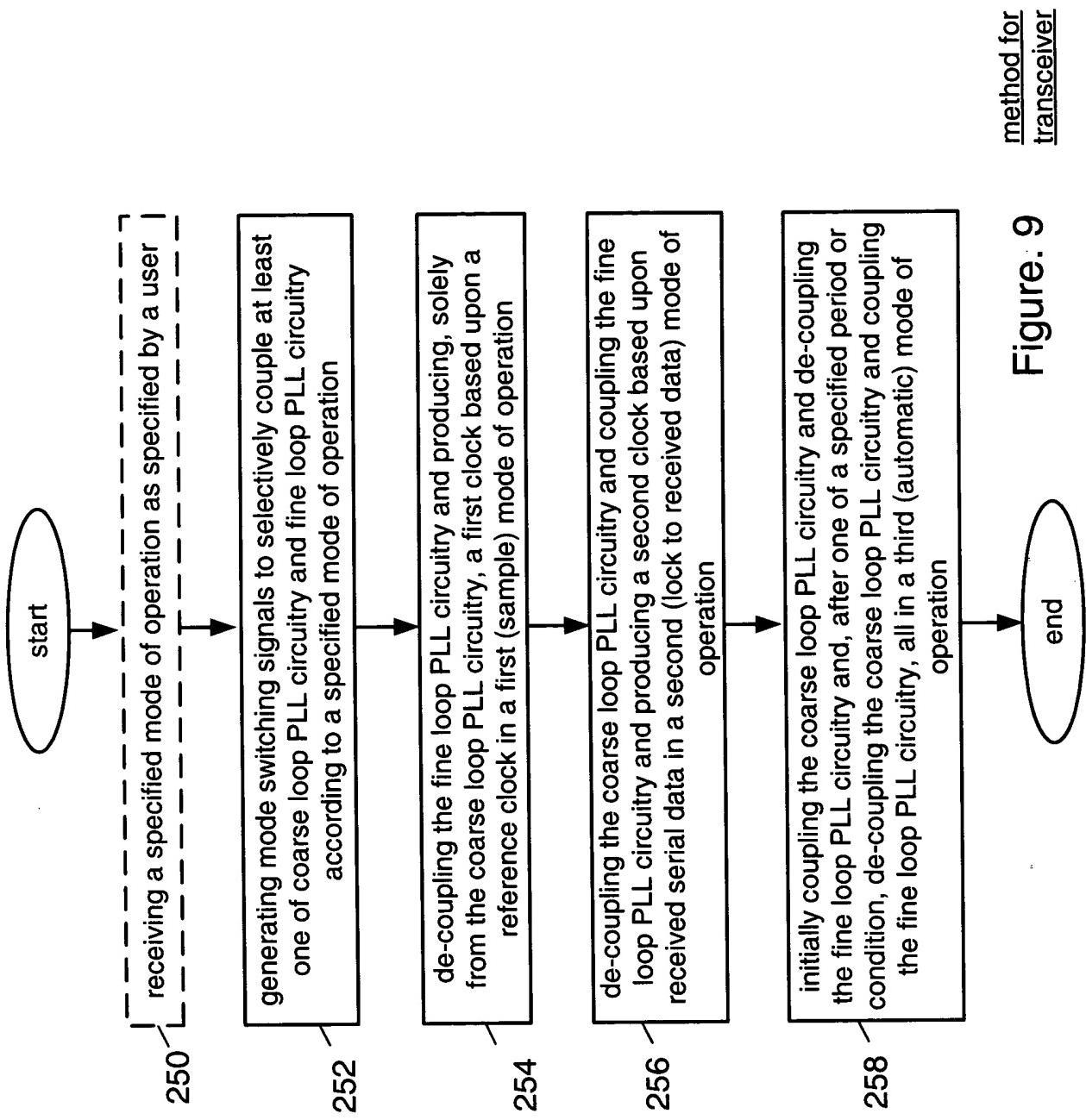


Figure 8  
ATE CDR/  
sampler  
circuit 226



**Figure. 9**